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Subject: DEQ Comments on ARKEMA Draft Comment/Response Spreadsheet
Date: 01/09/2006 07:07 PM

Sean,

The DEQ team reviewed the comment/response spreadsheet for the ARKEMA EE/CA as requested. Please note that Jennifer Peterson also e-mailed you additional comments that are not covered below.

General Comments

A. There is considerable uncertainty and some confusion among the DEQ team, and I suspect our Partners, with respect to the EPA project model concerning how risk assessment elements will be used during the project. I spent quite a bit of time today answering questions from the DEQ project team regarding the role of risk screening and assessment. The uncertainty related to the risk assessment role complicated our review of the comment/response spreadsheet.

I think the project would greatly benefit from a regulatory meeting/conference call at which EPA clarifies the role of risk screening and risk assessment for the project. This would allow team members to ask any questions they have directly and ensure that everyone is operating with a common vision (something that I am pretty sure is not currently the case).

I know that having this conversation prior to transmitting the government reply on ARKEMA's responses is probably not an option, but DEQ is requesting that we have it as soon as possible.

B. There are a number of comments (e.g., No. 100, Section 4.1.2) to which ARKEMA requested additional clarification and the proposed government reply is that no additional clarification is necessary. Since DEQ is also unclear about what the government team is requesting for some of these comments, DEQ is encouraging EPA to keep an open project dialog with ARKEMA.

C. It is important for the government team to be as clear as possible in their comments as to whether they are directing their comments at the upland site characterization/risk assessment, source control or specifically in-water. ARKEMA is subject to both EPA and DEQ direction at the site. EPA comments and directives concerning upland risk assessment, site characterization and source control need to be closely coordinated with DEQ and in many cases may be outside of the scope of the early action.

For example, it is not clear from comment No. 45, Section 3.6, as to whether the comment is directed at the source control screening effort, upland risk assessment exposure scenarios, potential in-water groundwater resource development and subsequent exposure scenarios or all three. Upland exposure scenarios for groundwater are the subject of the upland risk assessment. EPA comments, not closely coordinated with DEQ will create, confusion, duplication of effort and are not warranted at this time. EPA is certainly free to review the upland groundwater exposure scenarios should they determine in the ROD that upland groundwater is within the boundary of the NPL site.

Specific Comments

No. 498, Section 2.2.3 and No. 503, Section 4.1.1 - The potential for dioxin to be formed and accumulate as a result of the chlorine manufacturing process at the ARKEMA site was not considered during the upland RI. The contention by AMEC outlined in their 10/25/05 letter that much of the dioxin in the Willamette is a result of the electrolytic reduction process at the ARKEMA facility has not been reviewed by DEQ. While AMEC's assertion (advanced on behalf of SLLI) may ultimately be determined to have merit, it should be understood that this assertion is not without potential conflict as SLLI is an acknowledged source of dioxin in the immediate vicinity. Has EPA reviewed the AMEC letter and drawn a conclusion? If not, it is suggested that the government team be careful about creating the perception that we agree with its conclusions. It certainly is fair to indicate that the issue has been raised and create a place holder until the government team has looked into the potential for dioxin creation at the site.

No. 410, Section 3.5 - It is important to understand the distribution of site contaminants relative to the conservative screening values that are being requested. However, if it is likely that the RAA will be drawn around a much smaller "principle threat" area the government response should state this intention.

No. 320, Section 4.1.1 - Stormwater is discharged to the river via stormwater outfalls, and it is an issue. The stormwater system does not feed drywells. ARKEMA has made initial efforts to control and limit the discharge to the river. Additional source control is necessary to prevent recontamination of an in-water remedy. It is likely that the majority of the existing system will be decommissioned as part of this effort.

Given the low concentrations of contaminants in site stormwater, DEQ is not considering potential leaks from the stormwater system a significant

potential source of groundwater contamination. Further, DEQ is not likely to consider stormwater leaking from conveyance lines a significant source at other upland sites. The proposed direction for ARKEMA to develop an approach in the revised work plan is an upland source control issue and outside the scope of the EE/CA. DEQ would be happy to discuss this further with EPA, but requests that the proposed government response be withdrawn to avoid project management confusion.

No. 105, Section 4.1.2.1 - The potential for contaminants in soil to leach and migrate to groundwater and surface water needs to be clear in the CSM. However, it appears that the comment may be confusing shallow soil exposure scenarios (i.e., <3 feet) and deeper soil (i.e., excavation workers (0 to 12 feet)) with the groundwater pathway. The potential for upland soil to act as a secondary source of contaminants (via leaching) to site groundwater and the river will be specifically considered in the upland hot spot evaluation which will be part of the upland source control effort. Soil contaminants that potentially may migrate to groundwater and the river will be identified and carried into the upland FS or source control alternatives evaluation. The purpose of the proposed government reply directing ARKEMA to assess the need to separate shallow soil from deep soil is confusing because it is not clear what the exposure pathway of concern is, and it will create unnecessary confusion and duplication for source control.

No. 130, Section 4.1.2.1 - Note that there is not currently an MCL for perchlorate as indicated in the draft government response.

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